

DEPARTMENT of ENVIRONMENTAL SERVICES  
Water Division - Watershed Management Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: PARKER POND	Lake Area (ha):	8.01
Town: JAFFREY	Maximum depth (m):	2.3
County: Cheshire	Mean depth (m):	1.4
River Basin: Merrimack	Volume (m <sup>3</sup> ):	113000
Latitude: 42°51'15" N	Relative depth:	0.7
Longitude: 72°00'25" W	Shore configuration:	1.00
Elevation (ft): 1050	Areal water load (m/yr):	13.51
Shore length (m): 1000	Flushing rate (yr <sup>-1</sup> ):	9.60
Watershed area (ha): 194.9	P retention coeff.:	0.52
% watershed ponded: 0.0	Lake type:	natural

BIOLOGICAL:

14 January 2002

16 August 2001

DOM. PHYTOPLANKTON (% TOTAL)	#1	SPARSE - NO DOMINANT	TINY PENNATE DIATOM 35%
	#2		RHIZOLENIA 35%
	#3		FILAM. BL-GR SPP 8%
PHYTOPLANKTON ABUNDANCE (units/mL)			
CHLOROPHYLL-A (µg/L)			8.91
DOM. ZOOPLANKTON (% TOTAL)	#1	KERATELLA 44%	KERATELLA 36%
	#2	CILIATE SPP. 31%	NAUPLIUS LARVA 26%
	#3		HEXARTHRA 20%
ROTIFERS/LITER		127	1143
MICROCRUSTACEA/LITER		40	549
ZOOPLANKTON ABUNDANCE (#/L)		254	1817
VASCULAR PLANT ABUNDANCE			Very abundant
SECCHI DISK TRANSPARENCY (m)			1.1
BOTTOM DISSOLVED OXYGEN (mg/L)		10.7	4.1
BACTERIA (E. coli, #/100 ml)	#1		7
	#2		
	#3		

SUMMER THERMAL STRATIFICATION:

not stratified

Depth of thermocline (m): None  
Hypolimnion volume (m<sup>3</sup>) : None  
Anoxic volume (m<sup>3</sup>) : None

**CHEMICAL:**

Lake: PARKER POND

Town: JAFFREY

	14 January 2002		16 August 2001		
DEPTH (m)	1.0		1.0		
pH (units)	6.0		6.2		
A.N.C. (Alkalinity)	3.3		3.3		
NITRATE NITROGEN	0.06		< 0.05		
TOTAL KJELDAHL NITROGEN	0.60		0.50		
TOTAL PHOSPHORUS	0.017		0.020		
CONDUCTIVITY (µmhos/cm)	91.1		78.6		
APPARENT COLOR (cpu)	44		65		
MAGNESIUM			0.66		
CALCIUM			2.2		
SODIUM			9.7		
POTASSIUM			< 0.40		
CHLORIDE	22		19		
SULFATE	5		2		
TN : TP	39		25		
CALCITE SATURATION INDEX			4.2		

All results in mg/L unless indicated otherwise

**TROPHIC CLASSIFICATION: 2001**

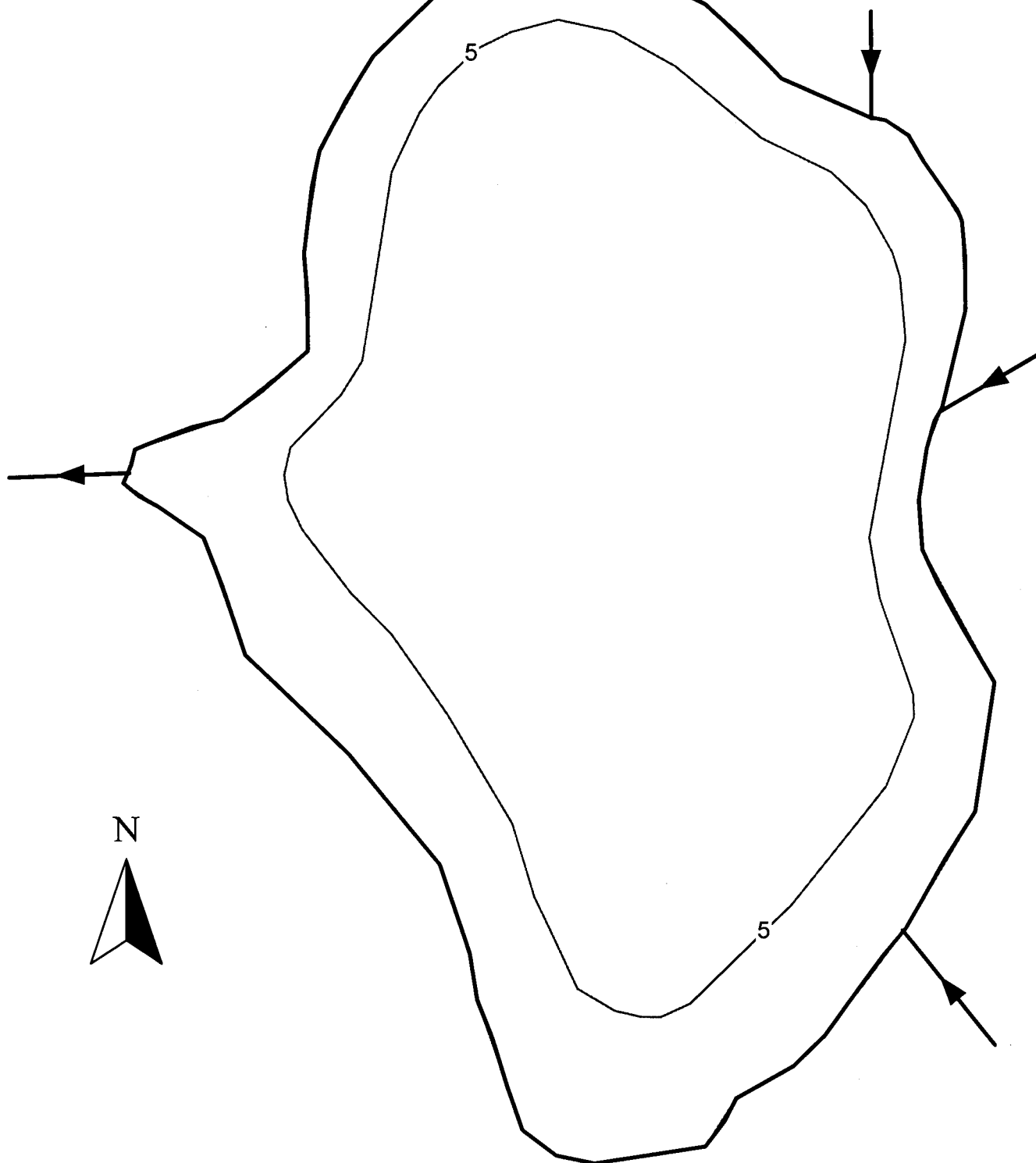
D.O.	S.D.	PLANT	CHL	TOTAL	CLASS
**	4	6	2	12	Eutro.

**COMMENTS:**

1. This pond is accessible by foot only – approximately a ½ mile hike. Access to the water itself was by wading through knee-deep wetland muck and water to reach the open water.
2. Water level was down about 6 inches at the time of the summer survey.
3. This is a shallow, tea-colored eutrophic pond. Net phytoplankton was varied with 26 genera listed. Zooplankton were very abundant.
4. The sodium and chloride levels were unusually high for a remote pond. Road salt from Rt. 137 may be reaching the pond through the wetland.

# Parker Pond

Jaffrey



N

0 0.05 0.1 Kilometers

5 foot depth contour

[illegible]

TOWN: JAFFREY  
WEATHER: Sunny, warm and breezy

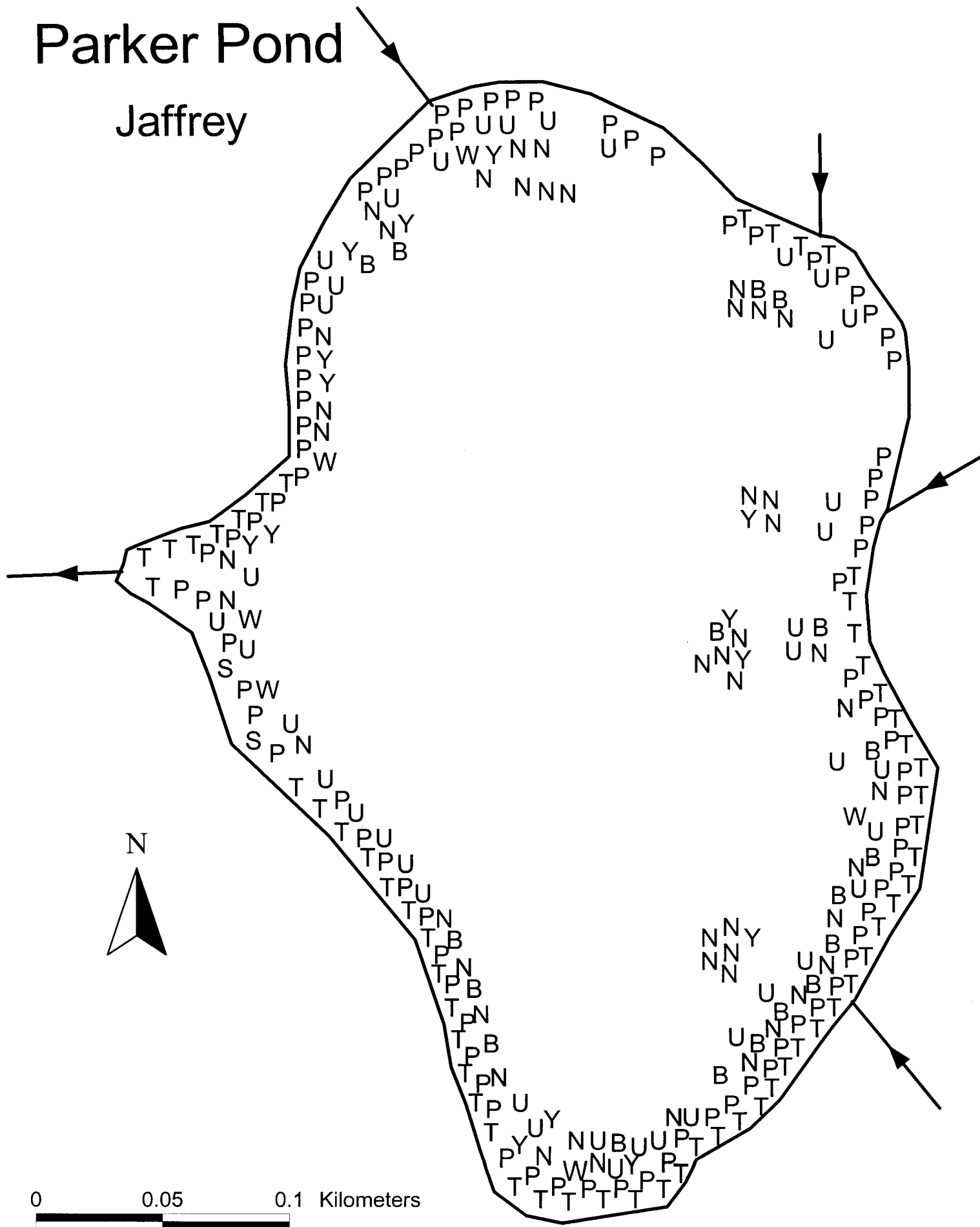
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**COMMENTS :**

\*Dissolved oxygen values are in mg/L

# Parker Pond

## Jaffrey



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